

 <div style="text-align: center;"> <b>STATE OF ALASKA</b>  <b>DEPARTMENT OF TRANSPORTATION</b>  <b>AND PUBLIC FACILITIES</b> </div> <div style="text-align: center; font-size: 1.5em; font-weight: bold;">Policy and Procedure</div>		POLICY AND PROCEDURE NUMBER <b>DPDR 07.05.020</b>	PAGE 1 of 3
		EFFECTIVE DATE April 10, 1992	
SUBJECT <b>Highway Pavement Maintenance and Rehabilitation Procedure</b>		SUPERSEDES	DATED
TITLE <b>Maintenance and Operations</b>	CHAPTER <b>Highways</b>	APPROVED BY	

## PURPOSE AND SCOPE

The following procedures are provided for developing pavement rehabilitation projects and maintenance recommendations based on the Pavement Management System (PMS) as established by Policy number 07.05.020 -- *Highway Pavement Maintenance and Rehabilitation Policy*.

## DISTRIBUTION

All holders of the Department of Transportation & Public Facilities Procedures Manual.

## PROCEDURE

### A. Organization

#### 1. Management Committees

The PMS Management Committees will include the Directors and Planning Chiefs of each of the Regions and Headquarters. The Headquarters Management Committee will include the Commissioner and Deputy Commissioner.

#### 2. Technical Committees

The PMS Technical Committees shall be composed of designated representatives from planning, design, construction, maintenance, materials, and traffic data. In Headquarters, the committee will also include a representative of the ROADLOG database, the Highway Improvement Planning System, and the Highway Planning Monitoring System.

#### 3. Pavement Manager Engineer

### B. Duties

#### 1. Management Committees

The PMS Management Committees approve the method of performing optimization; 1) selection of relative pavement condition targets if category optimization (MPSRUN) is used and, 2) rehabilitation and maintenance budget if statewide optimization (ROADPLAN) is used.

## 2. Technical Committees

The PMS Technical Committees are responsible for providing technical oversight of the Pavement Management System including reviewing all technical input. The committees provide current cost data for the various maintenance and rehabilitation alternatives. The committees work with the Pavement Management Engineer to develop rehabilitation projects from the system recommendations.

## 3. Pavement Management Engineer

The Pavement Management Engineer is responsible for maintaining the pavement management computer programs and pavement prediction models. He or she provides training for the personnel and processes and checks the pavement condition data for uploading into the mainframe database (ROADLOG). The Pavement Management Engineer runs the PMS computer programs and works with the Technical Committees to develop rehabilitation projects. The Pavement Management Engineer monitors project Equivalent Axle Loads, pavement designs, construction materials testing, and pavement maintenance to provide feedback to ensure that the Pavement Management System models are current.

## 4. Regional Traffic Data Sections

Regional Traffic Data Sections are responsible for collecting the pavement condition data.

## 5. Information Systems Programmers

Information System programmers are responsible for uploading the pavement condition data into the mainframe database (ROADLOG) and for upgrading the pavement management programs.

## C. Procedures

1. The pavement management procedure begins by measurement of the pavement condition data. Pavement roughness and rut depth data will be collected with the South Dakota Profiler mounted in the statewide video and profiler van. (To the extent possible, the driver will be the operator of the video log system. The profiler operator will be provided by the region.) The crack and patch data will be collected from a separate van using visual observations recorded in a laptop computer or manually.
2. Interstate and Principle Arterials in the Central and Northern Regions will be profiled (with rut depth) annually; crack and patch data will be measured every

other year. All other routes (including ramps) will be measured for cracking and patching, profile, and rut depth biannually. All routes in the Southeastern Region will be measured for profile, rut depth, cracking and patching biannually.

3. The Pavement Management Engineer processes and checks the pavement condition data and prepares a file for upload into the mainframe database (ROADLOG).
4. Information system programmers upload and verify the data once it is in the database.
5. The Pavement Management Engineer obtains current cost data for the various maintenance and rehabilitation alternatives from the Technical Committees.
6. The Pavement Management Engineer obtains approval from the Management Committees on either the statewide rehabilitation budget or the long term pavement condition targets.
7. The Pavement Management Engineer runs the pavement management computer programs including overrides for rehabilitation projects previously included in the six year Capital Improvement Program (CIP) plan.
8. Planning representatives on the Technical Committees work with the Pavement Management Engineer to prepare a preliminary list of rehabilitation projects.
9. The Technical Committees then meet with the Pavement Management Engineer to provide input into the project selection procedure.
10. If possible, representatives of the Technical Committees and the Pavement Management Engineer will perform a field review of the selected projects.
11. The Pavement Management Engineer prepares a list of the recommended projects, including a recommended rehabilitation alternative, design life, year of construction, and preliminary cost for each project.
12. Regional Planning Sections use the list to develop their Six Year CIP plan. If a project is not programmed, a memo documenting the reasons is sent to the Director of Planning, with a copy to the Pavement Management Engineer.
13. The Pavement Management Engineer prepares pavement maintenance recommendation, including; 1) preventive maintenance (crack sealing & minor patching) location and cost, 2) unstable foundation re-leveling and 3) minimum corrective maintenance.
14. The Pavement Management Engineer prepares strip maps of pavement condition for all major routes.
15. The Pavement Management Engineer prepares a State of the Pavement Report.